

REMARKS

Claims 35, 47, and 58 are disclosed in Figures 1-5 and related discussions on pages 5-8. For example, Figure 2 shows: the input digital image (210) has an image width and image height, wherein the first image portion (220) has a first height substantially the same as the image height (210 and 220 has the same height) and has a first width different from the image width (210 and 220 have different widths).

Figure 3 shows: the input digital image (310) has an image width and image height, wherein the second image portion (320) has a second width substantially the same as the image width (310 and 320 has the same width) and has a second height different from the image height (310 and 320 have different heights).

Figure 5 shows the overlapping portion (520) of the input digital image based on the first printable image portion (520 plus 540) and the second printable image portion (520 plus 530). Figure 4 shows other variations of the overlapping portion (410, 420, 430, 440, 450, 460).

Furthermore, the present specification describes (in the 2nd and 4th paragraphs on page 6):

“The user can order prints of different print formats to be made using the digital image by the photo-finishing service provider in step 130 of FIG. 1. Typical print formats include 3.5”x5”, 4”x6”, 5”x7”, 8”x10”, 11”x14” and so on. The print formats possess different aspect ratios (e.g. 10:7, 6:4, 7:5, 10:8, 14:11, etc.), which may be different from the aspect ratio of 4:3 of the input digital image 210 in FIG. 2.

As previously described, a problem in the digital photo printing industry is the undesired image content loss in printing digital images. For a selected print format, any portion of the input image with the same aspect ratio as that of the selected print format is a printable image portion. The maximum printable image portion is a printable image portion with the most possible information of the input image. Any portion of the input image outside the maximum printable image portion is the un-printable image portion.

For example, to produce an 8”x10” image print, a digital image having an aspect ratio of 1.25 (10:8) is required. The maximum printable image portion 220 for an 8”x10” print format is determined in step 140 as illustrated in FIG. 2. While the maximum printable image portion 220 has the same height of 1500 pixel as the input digital image 210, the width of the maximum printable image portion 220 is 1875 pixels, shorter than the width of the input digital image 210. As a result, a portion 230 of the input digital image 210 is unprintable on an 8”x10” print. In other words, the unprintable portion 230 needs to be cropped off of the input digital image 210 in preparing for an 8”x10” print. If the whole input digital image 210 is displayed in a print preview to the user, the user may be unpleasantly surprised by the unexpected

image loss after he or she receives the 8"x10" print."

As described, the problem arises from the difference aspect ratios between the input image and printing formats. Some portion of an image viewable at a user interface on a computer display may not be printable, which may cause a user to be "unpleasantly surprised". Additional difficulty (that is not appreciated in the cited references) is due to the fact that different printing formats also have different aspect ratios. A solution needs to address not only the problem of unprintable image portion for one print format, but also for multiple print formats (e.g. 3.5"x5", 4"x6", 5"x7", 8"x10", 11"x14" with respective aspect ratios of "10:7, 6:4, 7:5, 10:8, 14:11").

The advantages of the invention concepts have been thoroughly discussed in multiple sections of the present application. For example, the third paragraph on page 3 clearly states:

In one aspect, the present invention solves a long felt need in the digital photo-finishing field: portion of the image content viewable in an image preview is often lost when the image is reproduced on an images print. The present invention provides an improved system and methods for previewing digital images of different aspect ratios and printing the digital images at different print formats (i.e. "**safe cropping**"). The present invention allows all the image content viewable to the user in a preview of the digital image to be printed on an image receiver, independent of the format of the image prints. No image content is lost from previewing to printing.

Kuchta does not teach "determining an overlapping portion between the first image portion and the second image portion" and "displaying the overlapping image portion without displaying portions of the digital image outside of the overlapping portion such that only the overlapping portion of the digital image is visible to the user" in claim 35.

Kuchta teaches separate image scales type such as "% By Pixels", "% By Size" in Column 12. There is no interaction disclosed between the different scale types. There is no teaching about "determining an overlapping portion between the first image portion and the second image portion" or "displaying the overlapping image portion without displaying portions of the digital image outside of the overlapping portion".

Iwata does not include "displaying the overlapping image portion without displaying portions of the digital image outside of the overlapping portion such that only the overlapping portion of the digital image is visible to the user" in claim 35.

Iwata shows (in Figure 39) areas of a substrate (e.g. paper) that can be laid ink on by different printers. The substrate has the same size and aspect ratio for different printers. Figure 39 is intended to illustrate relationship between printing areas by different printers. Figure 39 is not intended for viewing by a user. Iwata has no teaching or motivation to display “overlapping image portion without displaying portions of the digital image outside of the overlapping portion”.

Moreover, Figure 39 shows the overlapping portion of the printing areas and areas **outside of the common printable areas** (the hatched area in the lower Figure in Figure 39). Iwata thus cannot have “displaying the overlapping image portion **without displaying portions of the digital image outside of the overlapping portion**” or “such that **only the overlapping portion of the digital image is visible to the user**” in claim 35.

In sum, at least one element in each of claims 35, 47, and 58 is missing in Kuchta and Iwata. Kuchta and Iwata cannot be combined to produce the methods recited in the amended claim 35, 47, and 58. Kuchta and Iwata cannot render the amended claims 35-59 obvious.

CONCLUSION

Applicants believe that the above discussion is fully responsive to all grounds of rejection set for the in the Office Action.

If for any reasons the Examiner believes a telephone conference would in any way expedite resolution of the issues raised in this office action, the Examiner is invited to telephone the undersigned at 650-610-3522.

Respectfully submitted,

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/Xin Wen/

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